

Notice of Allowability

Application No.

09/538,030

Examiner

Dai A. Phuong

Applicant(s)

TURLEY ET AL.

Art Unit

2685

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 09/01/2005.
2. ☒ The allowed claim(s) is/are 1-10.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____ |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____ |

Reasons for Allowance

1. The following is an examiner's statement of reasons for allowed:

Claims 1-10 are allowed.

Regarding claim 1, the prior art record does not disclose nor fairly suggest a switch matrix for coupling an uplink beam to a demodulator, comprising: an input module, the input module having a plurality of inputs at least equal to a number of cells in frequency reuse pattern, the inputs receiving at least one uplink beam, and a plurality of outputs, the plurality of outputs at least equal to a number of subband in the uplink beam, **wherein the input module comprise at least one power splitter, wherein a number of power splitter is at least equal to the number of cells in the frequency reuse pattern, wherein each power splitter splits each input into a plurality of substantially equal power outputs, a number of power outputs at least equal to the number of subbands;** and an output module, the output module coupled to the input module, for selectively coupling the outputs from the input module to an output of the output module, the output of the output module coupled to a demodulator thereto.

Regarding claim 6, the prior art record does not disclose nor fairly suggest a switch matrix for coupling an uplink beam to a demodulator in a satellite system, wherein the satellite system receives input from cells in a cell pattern, comprising: (a) a plurality of input modules, each having a plurality of inputs at least equal to a number of cell in a reuse pattern for the satellite system, each input module comprising: **(1) a plurality of power splitters, wherein the plurality of power splitters is at least equal to the number of cells in the reuse pattern for the satellite system, wherein each power splitters spits each input into a plurality of substantially equal power outputs, a number of power outputs at least equal to a number of**

subbands used by the satellite system; and (2) a plurality of switch modules, coupled to the plurality of power splitters, each switch module accepting a plurality of inputs at least equal to the number of cells in the reuse pattern for the satellite system, the plurality of switch modules at least equal to the number of subbands used by the satellite system; and (b) a plurality of output modules, coupled to the input modules through the plurality of the switch module, each having a plurality of inputs at least to the number of cells in the cell pattern, comprising: (1) a first set of output matrices, each output matrix in the first set of output matrices having a plurality of inputs at least equal to the number of subbands used by the satellite system; and (2) a second set of output matrices, coupled to the first set of output matrices, each output matrix in the second set of output matrices having a plurality of outputs at least equal to a number of demodulators used by the satellite system in each subband.

2. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submission should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dai A Phuong whose telephone number is 571-272-7896. The examiner can normally be reached on Monday to Friday, 9:00 A.M. to 5:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban can be reached on 703-305-4385. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

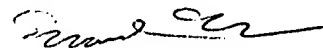
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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dai Phuong

AU: 2685

Date: 09-15-2005



EDWARD F. URBAN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600